

HMIS Hazard Rating:

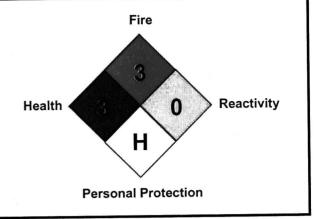
4 = Severe

3 = Serious

2 = Moderate

1 = Slight

0 = Minimal



I. Chemical Product and Company Identification

Product Name:

Acid Inhibitor 2 (AI-2)

Identification #:

35-405-0002

Product Use/Class:

Acid Corrosion Inhibitor

Supplier:

Superior Well Services

Manufacturer:

Weatherford Fracturing Technologies

Emergency Contact:

CHEMTREC 1 (800) 424-9300

Prepared By:

RAA

Date Prepared:

03/17/2008

II. Composition/Information on Ingredients

Chemical Name: Glycol Ether
CAS Number: 111-76-2

Percent by Mass Less Than: 10-30

Exposure Limits

Threshold Limit Value - Time Weighted Average: 25 ppm
Threshold Limit Value - Short Term Exposure Limit: NE
Permissible Exposure Limit - Time Weighted Average: 25 ppm
Permissible Exposure Limit - Ceiling: NE

Company Threshold Limit - Time Weighted Average: NE Skin: NO

Chemical Name: Propargyl Alcohol

CAS Number: 107-19-7
Percent by Mass Less Than: 10-30

Exposure Limits

Threshold Limit Value - Time Weighted Average:

1 ppm
Threshold Limit Value - Short Term Exposure Limit:

3 ppm
Permissible Exposure Limit - Time Weighted Average:

NE
Permissible Exposure Limit - Ceiling:

Company Threshold Limit - Time Weighted Average:

NE
Skin:

NO

Chemical Name: Isopropyl Alcohol

CAS Number: 67-63-0
Percent by Mass Less Than: 10-30

Exposure Limits

Threshold Limit Value - Time Weighted Average:

400 ppm
Threshold Limit Value - Short Term Exposure Limit:

500 ppm
Permissible Exposure Limit - Time Weighted Average:

400 ppm
Permissible Exposure Limit - Ceiling:

500 ppm
Company Threshold Limit - Time Weighted Average:

NE

Company Threshold Limit - Time Weighted Average: NE Skin: NO

Chemical Name: Proprietary Component

CAS Number: XXXX-XX-X

Percent by Mass Less Than: 3-7

Exposure Limits

Threshold Limit Value - Time Weighted Average:

Threshold Limit Value - Short Term Exposure Limit:

Permissible Exposure Limit - Time Weighted Average:

Permissible Exposure Limit - Ceiling:

Company Threshold Limit - Time Weighted Average:

NE

Skin:

NO

III. Hazardous Identification

Emergency Overview: Harmful if absorbed through skin or swallowed. Flamable liquid and vapor. May cause flash

fire or explosion.

Eve Contact:

Severely irritating. If not removed promptly, product will injure eye tissue, which may result

in permanent damage.

Skin Contact:

May cause skin irritation. Allergic reaction is possible. May cause skin sensitization, an

allergic reaction, which becomes evident on re-exposure to this material.

Inhalation:

POISON! May be fatal if inhaled. May be irritating to mucus membranes and lung tissue.

Ingestion:

POISON! Fatal if swallowed. May be irritating to mouth, throat, and stomach.

Chronic Harards:

Overexposure may cause kidney damage. May cause liver disorder (e.g. edema,

proteinuria) and damage.

Primary Route(s)

of Entry:

Skin Contact

Eye Contact

Ingestion

Skin Absorbtion

Inhalation

IV. First Aid Measures

Eye Contact: Immediately flush eye with plenty of water for at least 15 minutes while holding eyelids open.

Get medical attention if irritation persists.

Skin Contact: Immediately flush skin with plenty of water. Remove clothing. Get medical attention

immediately. Wash clothing seperately before reuse.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention.

Ingestion: If swallowed, induce vomiting immediately as directed by medical personnel. Never give

anything by mouth to an unconscious person. Get medical attention immediately.

V. Fire Fighting Measures

Flash Point:

85 F

Auto Ignition Temperature: Not Determined

Lower Explosive Temp.:

1.1%

Upper Explosive Temp.:

12.0%

Extinguishing Media:

Alcohol Foam, CO2, Dry Chemical, Foam, Water Fog

Harards:

Unusual Fire and Explosive Vapors may form explosive mixture with air. Vapors can travel to a source of ignition and flash back. Flmmable liquid. Can release vapors that form explosive mixtures at

temperatres at or above the flashpoint. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained,

properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

Special Fire Fighting

Procedures:

Containers can build up pressure if exposed to heat (fire). As in any fire, wear selfcontained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Apply alcohol-type foam or all purpose foam by manufacturers recommended techniques for large fires. Use carbon dioxide or dry chemical media for

small fires. Use water spray to cool containers.

VI. Accidental Release Measures

Material is Released or Spilled:

Steps to be Taken in Case Extinguish all possible ignition source until the area is determined to be free from fire or explosive hazards. Evacuate area. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches. (See section VIII.) Wear a self-contained breathing apparatus and appropriate personal protective equipment. Spilled material should be contained and disposed of properly.

VII. Handling and Storage

Handling: Wash thoroughly after handling. Handle all chemicals with care. Ground and bond

containers when transferring materials.

Storage: Keep away from heat, sparks, and flames. Keep container closed when not in use. Store in

a cool, dry, well ventilated place away from incompatible materials. Store away from

foodstuffs or animal feed.

VIII. Exposure Controls/Personal Protection

Local exhaust and vetalilation may be necessary to control any air contaminants to within **Engineering Controls:**

their TLVs during the use of this product.

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge when

> airborne concentrations are expected to exceed exposure limits. Protection by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances

where air purifying respirators may not provide adequate protection.

Where contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety Skin Protection:

goggles plus a face shield.

Eye Protection: Wear safety glasses with side sheilds (or goggles) and a face shield. Do not wear contact

lenses.

Other Protective

Equipment:

Where splashing is possible, full chemically resistant protective clothing (aicd suit) and boots are required. Emergency eyewash stations and deluge showers should be available in the

work area.

Wash hands before eating. Use only in a well ventilated area. Remove contaminated Hygenic Practices:

clothing and wash before reuse. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Ground and bond containers when

transferring material. Avoid contact with eyes, skin, and clothing.

IX. Physical and Chemical Properties

Boiling Point:

180-340 F

Vapor Density:

Heavier than air Not Determined

Odor:

Not Determined

Odor Threshold: **Evaporation Rate:**

Faster than Butyl Acetate

Appearance:

Dark Red

Specific Gravity:

Solubility in H20:

Complete

0.9700

Freeze Point:

Not Determined

pH at 50.0%:

1.5

Vapor Pressure:

Not Determined

Viscosity:

Not Determined

Physical State:

Liquid

Coefficient of Water Oil

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Not Determined Distribution:

X. Stability and Reactivity

Conditions to Avoid:

Excessive heat. Excessive heat causes the vapor pressure to increase rapidly.

Incompatability:

Reacts violently with oxidizing agents. Avoid contact with strong acids.

Hazardous Decomposition

Carbon dioxide which can act as a asphyxiant. Carbon monoxide which is toxic if inhaled.

Products:

Nitrogen oxide.

Hazardous Polymization:

Will not occur under normal conditions.

Stability:

This product is stable under normal storage conditions.

XI. Toxicological Properties

Toxicological Properties:

No product information is available. No product information is available.

Dermal:

Oral:

No product information is available.

Inhalation:

Ecotoxicity:

No product information is available.

XII. Ecological Information

Ecological Properties:

No productinformation is available. No product information is available.

Chemical Fate Information: No product information is available.

XIII. Disposal Consideration

Disposal Method:

Consult local, state, and federal regulatory agencies for acceptable disposal procedures and

disposal locations. Disposal in streams or sewers may be prohibited by federal, state, and

local regulations.

RCRA Status:

DOO1-Characteristic of ignitability.

XIV. Transportation Information

DOT Proper Shipping

Flammable liquids, toxic, n.o.s.

Name:

DOT Technical Name:

Contains Isopropanol and Propargyl Alcohol

DOT Hazard Class:

3

DOT Hazard Subclass:

DOT UN/NA Number:

UN1992

Packing Group:

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XV. Regulatory Information

OSHA:

Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

TSCA Status:

All components of this product are listed on the Toxic Substance Control Act Inventory or are

excluded from the listing requirements.

CERCLA SARA:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under the sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following

categories .:

Immediate Health Hazard, Chronic Health Hazard, Fire Hazard

SARA Section 313

Chemical

CAS Number

WT/WT%

Required Reporting:

Glycol Ether

111-76-2

10-30

XVI. Other Information

Other Information:

NA = Not applicable

ND = Not Determined

NI = No Information

NE = Not Established

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, or when used in conjunction with other products, exposures must be evaluated by the user so that appropriate handling practices and training programs can be established to ensure safe workplace operations. This information is confidential to Superior Well Services, Ltd. (SWSI) and intended solely for the use of the individual or entity to whom they are directly distributed. Distribution or use beyond the individual or entity is strictly prohibited without the consent of SWSI.